The Center for Medical Genomics OMICRON at the Jagiellonian University Medical College in Krakow, Poland is organizing a practical Workshop with an overview of several important high-throughput techniques that are in current use in the fields of genomics, transcriptomics and proteomics.

Location: Center for Medical Genomics OMICRON, ul. Kopernika 7C, 31-034 Kraków, Poland

Date: March 2-6 2015

Time: 9 AM – 5 PM daily

Limited attendance: Workshop participation is limited to 15 participants (participants will be registered on a first come, first serve basis).

Costs of participation: participation is free of charge for all participants; participants travelling form outside of Krakow will receive reimbursement for travel expenses and will be provided with accommodation.

The Workshop will include 1) lectures on the relevant topics, 2) practical demonstrations of the following techniques: organoid cell culture from intestinal stem cells, microarray genotyping in the context of genome-wide association studies, next generation sequencing of RNA in search of cancer fusion genes, protein quantification by isobaric tagging (iTRAQ), and 3) examples of the analytical pipelines of the obtained data.

The rough schedule of the Workshop is provided – attachment 1 (slight modifications are permitted).

The Workshops will be held in English.

The Workshop will also include a tutorial about Intellectual Property Rights.

Applications (name, affiliation, contact information) must be submitted via email to the following address: omicron@cm.uj.edu.pl by February 27*, 2015.

(*) For those who will be needing accommodation, applications must be submitted by February 23rd.

If a participant that has signed up to attend the Workshop, decides not to take part in the entire programme or part of it, he or she may be charged application processing costs. Please, inform the organizer by February 27th (12:00 PM) if you will not be able to attend.
Attachment 1

Workshop programme

Monday 02.03.2015
Proteomics - iTRAQ lecture
Sequencing of fusion genes, library prep
Bioinformatics - introduction + practical exercises 1
Cell culture - sorting of stem cells from tissue
Cell culture - lecture on organoid culture
IPR course

Tuesday 03.03.2015
Proteomics - iTRAQ, sample labeling
Sequencing of fusion genes - lecture
Bioinformatics - introduction + practical exercises 2
Cell culture - watching various stages of organoid growth

Wednesday 04.03.2015
Proteomics - fractionation of the samples
Sequencing of fusion genes - main experiment
Bioinformatics - introduction + practical exercises 3
Cell culture - collection of cell fractions

Thursday 05.03.2015
GWAS - lecture 1
GWAS - microarray experiment part 1
Proteomics - mass spec analysis
Sequencing of fusion genes - analysis of the data

Friday 06.03.2015
GWAS - lecture 2
GWAS - lecture 3
GWAS - microarray experiment part 2
Proteomics - interpretation of the results